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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,524	07/24/2003	Thomas Joseph Corden	2075-46	8153

23117 7590 10/31/2005

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EXAMINER

STAICOVICI, STEFAN

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/625,524		CORDEN ET AL.	
	Examiner		Art Unit	
	Stefan Staicovici		1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-40 is/are pending in the application.
- 4a) Of the above claim(s) 24-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-23 and 36-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/24/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/506,363.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/24/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I in the reply filed on September 12, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Specification

2. The abstract of the disclosure is objected to because the abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 13-21, 23 and 38-40 are rejected under 35 U.S.C. 102(b) as being anticipated by van der Berg (US Patent No. 5,225,129).

Regarding claims 13, 23 and 38-40, Van der Berg ('129) teaches the claimed process of molding a biodegradable polymeric article including, providing a shaped fibrous preform in a mold, injecting a monomer in said mold to impregnate said fiber preform and curing said monomer to form a polymer impregnated fiber article (see col. 6, lines 15-50).

In regard to claims 14-15 and further in regard to claims 39-40, Van der Berg ('129) teaches a fibrous preform that is a fabric (see col. 6, line 32), hence the fibers are oriented in a specific direction that is maintained during the injection process.

Specifically regarding claims 16-20, Van der Berg ('129) teaches a ϵ -caprolactone resin (thermoplastic resin) (see col. 2, lines 39-40). Further, Van der Berg ('129) teaches a lactide, glycolide and a caprolactone fiber (aliphatic polyesters), hence teaching a fiber having a different biodegradable than that of the injected resin.

Regarding claim 21, Van der Berg ('129) teaches fabrics as a fibrous preform, hence teaching long, continuous fibers.

Claim Rejections - 35 USC § 102/103

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 22 is rejected under 35 U.S.C. 102(b) as anticipated by van der Berg (US Patent No. 5,225,129) or, in the alternative, under 35 U.S.C. 103(a) as obvious over van der Berg (US Patent No. 5,225,129) in view of Dunn *et al.* (US Patent No. 4,655,777).

Van der Berg ('129) teaches the basic claimed process as described above.

Regarding claim 22, Van der Berg ('129) teaches that a fibrous preform having fibers of any length and thickness (diameter), wherein said preform is in the form of a fabric (see col. 6, lines 30-35). Therefore, it is submitted that the fabric in the process of Van der Berg ('129) must be formed using long, continuous fibers because a fabric requires a weaving pattern, hence requiring long, continuous fibers that have a much greater length on the order of 100 to 1000 times greater than the diameter of said fibers and also because, van der Berg ('129) teaches a fibrous preform having fibers of any length and thickness (diameter). However, even if Van der Berg ('129) does not specifically teach such dimensions, Dunn *et al.* ('777) teach a long, continuous fiber having a length to diameter ratio of 100:1 to 1000:1 (see col. 10, lines 55-65). Therefore, it would have been obvious for one of ordinary skill in the art to have provided long, continuous fibers having a length to diameter ratio of 100:1 to 1000:1 to form the fabric in the process of Van der Berg ('129) because it is known that such fibers provide for an improved fabric, whereas Van der Berg ('129) teaches a fibrous preform having fibers of any length and thickness (diameter), hence requiring the teachings of Dunn *et al.* ('777) to function as described.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over van der Berg (US Patent No. 5,225,129) in view of White (US Patent No. 4,436,684).

Van der Berg ('129) teaches the basic claimed process as described above.

Regarding claims 36 and 37, Van der Berg ('129) does not teach creating a 3-D image and a rapid prototyping system. White ('684) teaches a method of making implants by scanning the internal structure and processing the data to result in a 3-D data set; constructing a replica of the structure within the body; manipulating the data to obtain a 3-D data set of the structure in the body; selecting a reference line (54) and defining coordinates which represent the anatomy (11) measured from this reference line (column 12, lines 1-37); directly forming an implant from the coordinates or forming a mold cavity formed in two mating half sections extending in the direction of the reference line (54) and casting replicas within the mold cavity (column 15, lines 31- 59). Therefore, it would have been obvious for one of ordinary skill in the art to have provided the 3-D image and the rapid prototyping system of White ('684) in the process of Van der Berg ('129) because, White ('684) teaches that such a system provides for precise dimensioning of the resulting product, hence providing for an improved product.

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Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Staicovici, Ph.D. whose telephone number is (571) 272-1208. The examiner can normally be reached on Monday-Friday 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni, can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stefan Staicovici, PhD



Primary Examiner

10/26/05

AU 1732

October 26, 2005